

STACKED PIEZOELECTRIC DEVICE

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ABSTRACT OF THE DISCLOSURE

10 A stacked piezoelectric device, which is inexpensive  
and excellent in electric transmission efficiency and  
little deterioration of strength of an internal electrode  
layer, is provided by having an internal electrode layer  
containing not less than 50 percent by weight of Cu  
element, and not more than 5 percent of a pore occurrence  
expressed by  $(B/A) \times 100$  (%) wherein A is an area of an  
15 interface between the internal electrode layer and the  
piezoelectric layer and B is a sum of areas of pores  
which appear in the interface and have a diameter of not  
less than 0.1 micrometers. Preferably, a surface  
roughness Ra of the interface of the piezoelectric layer  
20 contacting the internal electrode layer is not more than  
0.5C ( $\mu\text{m}$ ) wherein C is a thickness of the internal  
electrode layer in micrometers. The piezoelectric  
material constituting the piezoelectric layer preferably  
comprises PZT which is a  $\text{Pb}(\text{Zr}, \text{Ti})\text{O}_3$ -based oxide having a  
25 perovskite structure.